Bridges to Stem Cell Research Internship Program

Grant Award Details

Bridges to Stem Cell Research Internship Program

Grant Type: Bridges

Grant Number: EDUC2-12617

Project Objective: This program provides stem cell training for up to 10 students per year (undergraduates and master's level) for 5 years at San Diego State University. Training includes coursework, outreach activities, and a 12 month research internship at local research institutions or biotech companies specializing in human stem cell research and development.

Investigator:

Name:	Ralph Feuer
Institution:	San Diego State University Foundation
Type:	PI

Award Value: $3,606,500

Status: Active

Grant Application Details

Application Title: Bridges to Stem Cell Research Internship Program

Public Abstract:

The Bridges to Stem Cell Research Internship Program will build upon the past success of our ongoing Internship Program which has significantly expanded the pool of personnel with the expertise necessary to undertake careers in regenerative medicine. Highly competitive trainees will be recruited from the university's diverse student populations, which include individuals from socio-economically disadvantaged communities, to attain essential expertise in regenerative medicine. A highly optimized curriculum for Trainees at the home institution includes a regulatory affairs course providing information about healthcare product regulation and development, a stem cell journal club course, colloquia and community outreach activities designed to provide students with educational and patient engagement opportunities, and participation in a biomedical ethics course. Trainees will complete a comprehensive, externally-provided laboratory training course which includes hands-on maintenance and characterization of induced pluripotent stem cells within a state-of-the-art Training Center designed by noted experts in the field. Trainees will complete a 12-month internship experience at one of four partnering stem cell research institutions located nearby, or at local biotechnology companies specializing in human stem cell research and development. During the internship period, Trainees will attend research seminars, meet and present their scientific progress at monthly colloquia with other trainees and participating host mentors and scientists, and present scientific posters encompassing their data at local and regional scientific meetings. The proposed program will also include a Diversity, Equity and Inclusion Plan to ensure diverse inclusive perspectives and personal experiences during the implementation of the program, and ensure outreach and recruitment of qualified persons for training who are representative of the diverse and different socio-economic backgrounds in the California population. The culmination of the training program will include a written thesis and oral thesis defense for graduate-level trainees, a final Poster Presentation Symposium, and participation at the Annual CIRM Bridges Meeting. The training program will enable students of diverse background to contribute their knowledge and technical skills developed upon completion of the training period to the great promise of stem cell-based treatment therapies for patients.

Statement of Benefit to California:

Stem cell-based treatment strategies represent the future of medicine for patients with unmet medical needs. Continued progress in the development and administration of these new therapies not only require ongoing basic and translational research, but also a sustainable approach whereby the next generation of scientists and technicians build upon the initial success of previous scientific accomplishments. The continuation of our ongoing training program will contribute to the generation of knowledgeable and well-trained scientists and technicians by providing hands-on research experiences in combination with rigorous academic curricula. The internship has been carefully crafted to increase the number of young investigators and technicians with varied career goals by recruiting students representing California's diverse population who can contribute to the development of stem cell based therapies and accelerate their eventual delivery to patients benefiting by these powerful new approaches.
